

IFW



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Re application of: Chen, et al.

Application Serial No.: 10/810,965

Filed: March 26, 2004

For: Novel Method to Improve Bump Reliability for Flip Chip Device

Patent No.: Unassigned

Issue Date: Unassigned

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

**CERTIFICATE UNDER 37 C.F.R. §3.73(b)  
ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION**

1. The assignee of the entire right, title and interest hereby seeks to take action in the PTO in this matter.

**IDENTIFICATION OF ASSIGNEE**

2. The assignee of this matter is:

**TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.**

8, Li-Hsin Rd. 6

Hsinchu Science Park

Hsinchu, Taiwan 300-77, R.O.C.

**PERSON AUTHORIZED TO SIGN**

3. Daniel R. McClure  
Attorney for Assignee

4. A chain of title from the inventor(s) to the current assignee is shown below:
- a. From: Yen-Ming Chen, Chia-Fu Lin, Shun-Liang Hsu, Kai-Ming Ching, Hsin-Hui Lee, Chao-Yuan Su and Li-Chih Chen  
To: Taiwan Semiconductor Manufacturing Company, Ltd.  
Recorded in PTO: Reel: 012573 Frame: 0276 (parent application)

**DECLARATIONS**

5. I, the undersigned, have reviewed all the documents in the chain of title of the

☒ application  
☐ patent

matter identified above and, to the best of my knowledge and belief, title is in the assignee identified above.

6. I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

7. I, the person signing below, aver that I am empowered to sign this statement on behalf of the assignee.



**Daniel R. McClure, Reg. No. 38,962**

Tel. No. 770-933-9500  
Customer No.: 24504

**THOMAS, KAYDEN, HORSTEMEYER  
& RISLEY, L.L.P.**  
100 Galleria Parkway, Suite 1750  
Atlanta, Georgia 30339-5948

Docket No. 252016-2530



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application:

Application No.:

Filed:

Title:

Commissioner for Patents

Washington, D.C. 20231

**POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST**  
**(REVOCATION OF PRIOR POWERS)**

As assignee of record of each of the patent applications listed in the table of attachment A,

**REVOCATION OF PRIOR POWERS OF ATTORNEY**

all powers of attorney previously given in each of the listed patent applications are hereby revoked, and

**NEW POWER OF ATTORNEY**

the following attorneys/agents are hereby appointed to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: I hereby appoint all attorneys of Thomas, Kayden, Horstemeyer & Risley, LLP, who are listed under the USPTO Customer Number shown below as the attorneys to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith, recognizing that the specific attorneys listed under that Customer Number may be changed from time to time at the sole discretion of Thomas, Kayden, Horstemeyer & Risley, LLP, and request that all correspondence about the application be addressed to the address filed under the same USPTO Customer Number.

**000047390**

Patent Trademark Office

Please direct all future correspondence and telephone calls to:

**Daniel R. McClure, Reg. No. 38,962**

**THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.**

100 Galleria Parkway, Suite 1750

Atlanta, Georgia 30339

770-933-9500

**ASSIGNEE OF ENTIRE INTEREST**

**TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.**

8, Li-Hsin Rd. 6

Hsinchu Science Park

Hsinchu, Taiwan 300-77, R.O.C.

**ASSIGNEE CERTIFICATION**

The certification under 37 C.F.R. §3.73(b) establishing the right of assignee to take action is attached hereto along with documentation evidencing same. Further, in my official position with Taiwan Semiconductor Manufacturing Company, Ltd., I am authorized to sign documents and otherwise act on its behalf in connection with the management and handling of patent applications and other intellectual property matters.

Date: Nov. 25, 2004

Chien-Wei (Chris) Chou

Chien-Wei (Chris) Chou  
Director - Intellectual Property Division

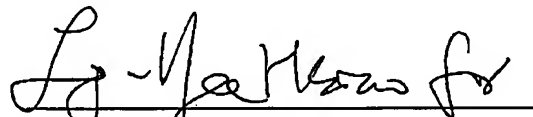
## Attachment A

No.	Serial No	TSMC No	Application Title	Filing Date	Assignment (Reel/Frame)
1	10/140,647	2001-0941	Prober Index Control for Remote Debugging by Web Browser	5/7/02	012902/0473
2	10/725,810	2001-0972	Method of the Adjustable Matching Map System in Lithography	12/2/03	014761/0759
3	10/694,426	2001-1094	Method of a Floating Pattern Loading System in Mask Dry-Etching Critical Dimension Control	10/27/03	015067/0473
4	10/672,403	2001-1457	Algorithms Tuning for Dynamic Lot Dispatching in Wafer and Chip Probing	9/26/03	014554/0202
5	10/286,626	2001-1265	Application of Impressed-Current Cathodic Protection to Prevent Metal Corrosion and Oxidation	11/2/02	013469/0539
6	10/134,820	2001-1349	Method for Measuring Gate-To-Body Current of Floating-Body PD SOI MOS Devices	4/26/02	012869/0369
7	10/822,197	2001-1440C	Embedded DRAM for Metal-Insulator-Metal (MIM) Capacitor Structure	4/9/04	Recorded 013982/0163 at the parent application USP6,720,232
8	10/749,698	2001-1510	Multivariate RBR Tool Aging Adjuster	12/31/03	014877/0720
9	10/081,985	2001-0725	Adjustment of N and K Values in a Darc Film	2/21/02	012644/0807
10	10/788,173	2001-1543	Chip Probing Equipment and Test Modeling for Next Generation MES(300MM)	2/26/04	015033/0283
11	10/631,842	2002-0228	Method to Form Self-Aligned Floating Gate to Diffusion Structures in Flash	7/31/03	Filed 7/31/03
12	10/406,122	2001-0938	High Performance Color Filter Process for Image Sensor	4/3/03	014181/0899
13	10/420,594	2001-0452B	Method to Fabricate Self-Aligned Source and Drain in Split Gate Flash	4/22/03	Recorded 012656/0769 at the parent application USP6,573,142
14	10/189,874	2001-0427	SCR-ESD Structures with Shallow Trench Isolation	7/5/02	013086/0425
15	10/726,105	2001-0427B	SCR-ESD Structures with Shallow Trench Isolation	12/2/03	Recorded 013086/0425 at the parent application USP6,720,622

16	10/810,965	2001-0413C	Novel Method to Improve Bump Reliability for Flip Chip Device	3/26/04	Recorded 012573/0276 at the parent application USP6,756,294
17	10/058,474	2001-0353	Electronic Customs Release Slip (E-CRS)	1/28/02	012553/0539
18	10/725,852	2001-0088B	Effective Vcc to Vss Power ESD Protection Device	12/2/03	Recorded 014859/0845 at the parent application USP6,682,993
19	10/357,136	2001-0043B	Novel Low Leakage Current Cascaded Diode Structure	2/3/03	Recorded 012326/0168 at the parent application USP6,537,868
20	10/626,778	2000-0659B	Novel Test Structure for Detecting Bridging of DRAM Capacitors	7/24/03	Recorded 011732/0773 at the parent application USP6,617,180
21	10/186,579	2000-0307B	Lossless Co-Planar Wave Guide in CMOS Process	7/1/02	Recorded 011498/0374 at the parent application USP6,465, 367
22	10/272,086	2002-0227	Method to Form Self-Aligned Split Gate Flash with L-Shaped Wordline Spacers	10/16/02	013408/0312

Date:

Nov. 25, 2004



Chien-Wei (Chris) Chou

Director - Intellectual Property Division